

**Amendments to the Claims:**

The following listing of claims will replace all previous versions and listings of claims:

**Claims:**

1. (Currently Amended) An electrical machine, comprising:
  - a housing assembly having first and second ends;
  - a first bearing mounted in said housing, said first bearing having a plurality of rolling elements disposed between first inner and outer races ;
  - a second bearing mounted in said housing and spaced away from said first bearing, said second bearing having a plurality of rolling elements disposed between second inner and outer races;
  - a rotor assembly including a shaft having first and second ends mounted in said first and second bearings, respectively, such that said ~~rotor~~ shaft has a predetermined amount of axial and radial play relative to said housing;
  - a biasing element disposed between one of said ~~rotor-assembly~~ shaft or said housing and one of said bearings, said biasing element for initially urging said rotor assembly to a preloaded position ~~which eliminates said axial and radial play relative to said housing~~, wherein said first inner race and said second inner race are locked into respective fixed positions secured to said ~~rotor-assembly~~ shaft and said first outer race and said second outer race are locked into respective fixed positions secured to said housing to ~~restrict prevent~~ axial and radial movement of each of said first inner race and said second inner race relative to said ~~rotor-assembly~~ shaft and said first outer race and

said second outer race relative to said housing, such that said ~~rotor assembly shaft~~ is locked retained in said preloaded position to prevent reciprocating axial and radial loading during machine operation;

wherein the coefficients of thermal expansion of said housing assembly, said rolling elements, races, bearings, and said rotor shaft are selected so that said rolling elements, races, bearings, and said shaft rotor assembly will be are retained maintained in said locked preloaded position due to the selected coefficients of thermal expansion during varying thermal conditions during machine operation over a temperature range of about -40°C to about 195°C.

2. (Canceled)

3. (Original) The electrical machine of claim 1 wherein said biasing element comprises a spring disposed between said rotor assembly and said first or second inner race.

4. (Original) The electrical machine of claim 1 wherein said biasing element comprises a spring disposed between said housing and said first or second outer race.

5. (Original) The electrical machine of claim 1 wherein said housing assembly comprises:

a generally cylindrical housing including an axially extending portion with a front end plate connected to a front end thereof; and

an end bell attached to a rear end of said housing.

6. (Canceled)

7. (Previously Presented) The electrical machine of claim 1 wherein said bearings are constructed from high carbon chromium steel and said housing assembly and said rotor assembly are constructed from 400 series stainless steel.

8. (Canceled)

9. (Canceled)

10. (Canceled)

11. (Canceled)

12. (Canceled)

13. (Currently Amended) An electric motor, comprising:

a generally cylindrical housing assembly having first and second ends,  
said housing defining first and second spaced-apart bearing pockets;

a first bearing having a plurality of rolling elements disposed between first  
inner and outer races, said first outer race being received in said first bearing pocket;

a second bearing having a plurality of rolling elements disposed between  
second inner and outer races, said second outer race being received in said second  
bearing pocket;

a rotor assembly including a shaft received in said first and second inner  
races, such that said rotor has a predetermined amount of axial and radial play relative  
to said housing;

a biasing element disposed between one of said ~~rotor assembly~~ shaft or  
said housing and one of said bearings which initially urges said ~~rotor assembly~~ shaft to  
a preloaded position which ~~eliminates said axial and radial play relative to said housing,~~  
wherein said first inner race and said second inner race are ~~secured~~ locked into  
respective fixed positions to said shaft, and said first outer race and said second outer  
race are ~~secured~~ locked into respective fixed positions to said housing to ~~restrict~~  
prevent axial and radial movement of each of said first inner race and said second inner  
race relative to the shaft and said first outer race and said second outer race relative to

the housing, such that said rolling elements, races, bearings and said rotor assembly  
shaft is retained are locked in said preloaded position to prevent reciprocating axial and  
radial loading during machine operation; and

wherein the coefficients of thermal expansion of said housing assembly,  
said rolling elements, races, bearings, and said shaft rotor are selected so that said  
rotor assembly rolling elements, races, bearings, and said shaft will be are retained  
maintained in said locked preloaded position due to the selected coefficients of thermal  
expansion during varying thermal conditions during machine operation over a  
temperature range of about -40°C to about 105°C.

14. (Original) The electric motor of claim 13 wherein said first and second outer  
races are secured to said housing, and said first and second inner races are secured to  
said shaft.

15. (Original) The electric motor of claim 13 wherein said biasing element  
comprises a spring disposed between said shaft and said first or second inner race.

16. (Original) The electric motor of claim 13 wherein said biasing element

comprises a spring disposed between said housing and said first or second outer race.

17. (Original) The electric motor of claim 13 wherein said housing assembly comprises:

a generally cylindrical housing including an axially extending portion with a front end plate connected to a front end thereof; and  
an end bell attached to a rear end of said housing.

18. (Canceled)

19. (Previously Presented) The electric motor of claim 13 wherein said bearings are constructed from high carbon chromium steel and said housing assembly and said rotor assembly are constructed from 400 series stainless steel.

20. (New) The electric motor of claim 13 wherein the coefficients of thermal expansion of said housing assembly, said balls, races, bearings, and said shaft are selected so that said rotor assembly will be retained in said preloaded position over a

temperature range of about  $-40^{\circ}\text{C}$  to about  $105^{\circ}\text{C}$ .